APPENDIX

8

Financial Instruments Used by Argentina During the Crisis

As alternatives to official financing and payment standstills, a number of financial instruments have been proposed to deal with an acute liquidity need during crisis. These include: (i) voluntary debt restructuring operations—buybacks and swaps without official enhancements; (ii) public guarantees and other enhancement to induce the provision of private financing; and (iii) private contingent credit lines. Argentina made use of all of these tools during 1999-2001. In the text, as well as in Appendix 7, we discuss voluntary debt swaps without official enhancements (as in the mega-swap of June 2001). In this appendix, we discuss the usefulness of official enhancements and guarantees to either induce new financing or achieve debt reduction, as well as of private contingent credit lines to help improve liquidity and debt sustainability. We will show that, as with voluntary debt restructuring, these instruments do not work under crisis conditions. A general lesson is that attempts at financial engineering when a country has severe debt servicing problems are futile. If debt is unsustainable, debt restructuring with a meaningful NPV reduction can only restore sustainability.

Guarantees and Enhancements

A number of proposals have been made to mobilize emergency liquidity from private creditors by providing an official guarantee or by using official resources to enhance a debt swap or buyback. The idea is to give private creditors access to the same preference in repayment given to official creditors, or to "enhance" private lending by using official resources to finance a debt buyback or a debt swap. Argentina used both forms of enhancement, the first in the case of the World Bank policy-based guarantee (PBG) loan and the latter in the failed attempt to reduce its debt burden in the fall of 2001 with the \$3 billion set aside for debt operations in the September augmentation. We will consider each in turn.

A private loan with a partial official guarantee

Partially guaranteed instruments are typically priced by the market as being a combination of two components: a guaranteed loan, which is valued as G-7 or World Bank risk; and an unguaranteed loan, which is valued as pure country risk. The guaranteed portion provides a financial benefit to the debtor, since the guarantee allows a risky country to borrow at a risk-free rate. But apart from this subsidy, no extra value is created by blending together a guaranteed and an unguaranteed bond. In fact, an instrument that combines a guaranteed portion and an unguaranteed portion is usually valued by the markets as being worth slightly less than a separate World Bank bond and a separate unguaranteed country bond. A \$3 billion guarantee for a \$6 billion bond is very similar to being able to borrow \$3 billion from the official sector and \$3 billion from private creditors.

Various proposals have been made to create partial guarantees that produce "more bang for the buck." In most cases, proponents argue that while the guarantee formally and legally covers a portion of the cash flow, the "halo" of the guarantee from an official creditor will fall on the entire loan. Official "pixie dust" will lower the spread on the uncollateralized component of the loan, since the debtor will be less inclined to default on even the unguaranteed payments. In practice, however, even attempts to create more complex structures designed to convince investors that the amount of de facto protection provided by the limited guarantee far exceeds the size of the formal guarantee have proven futile.

The most ingenious structure is a so-called rolling reinstatable guarantee, in which the World Bank guarantees the first payment of a bond. The guarantee is rolled to the next payment if the country has made the first payment. If the country cannot pay the guaranteed tranche, the World Bank would pay and the country will have a brief period of time to repay the World Bank. So long as the country is able to come up with the funds to repay the World Bank, the guarantee is "reinstated" and rolled to the next payment. The idea is simple: the country would not want to default on the World Bank, so the guarantee

¹This discussion relies in part on a more detailed treatment in Roubini and Setser (2004).

would almost certainly roll over and eventually cover the full bond. While the World Bank only formally guarantees the first payment, the "halo" of the guarantee would extend to the entire instrument.² In practice, however, the market has priced the bonds issued with such guarantees more like a single guaranteed bond and a series of unguaranteed bonds. This structure has never offered a realistic means of allowing countries experiencing liquidity problems during a crisis to raise funds at guaranteed interest rates.

Argentina was one of the countries to experiment with this structure. When Argentina missed the guaranteed payment on its rolling reinstatable bond, the World Bank stepped in to make that payment, and Argentina in turn increased its obligations to the World Bank by the amount the World Bank had paid on the guarantee. That was the easier part. The hard part was to decide whether or not to pay back the World Bank in time to allow the guarantee to be "reinstated" and then "roll" on to the next payment. At the advice of the World Bank, Argentina opted not to pay the Bank within the designated period, ending any chance that the guarantee would be "reinstated" and the formally unguaranteed balance would be protected. This incident assured that this structure would never be viewed again by the markets as conferring a "halo," and served to confirm the real risks associated with reinstatable guarantees. In a crisis, the official sector and the country must decide if the pixie dust is real: there is no room for ambiguity. Had the bond been honored in full, Argentina would have ended up in the worst of both worlds. It would have paid a higher rate for borrowing through this complex structure than for borrowing directly from the World Bank, yet ex post it would have treated the bond like other low-cost multilateral development bank debt. As it turned out, it was the creditors, rather than Argentina, that lost out.

Debt buybacks or swaps partially enhanced by official resources

A related issue is whether official enhancements can be used to reduce the debt burden of a country experiencing liquidity and debt sustainability problems. Use of official money to reduce debt burden was the idea behind the \$3 billion set aside for debt operations in the September 2001 augmentation for Argentina. We have already noted in the text that market-based voluntary swaps during a crisis would make the situation worse by increasing the real debt burden. The issue here is whether adding enhancements to such deals (that is, moving from a voluntary mega-swap in June to a \$3 billion enhanced swap or buyback in the fall) makes them more attractive. The simple answer is no. As articulated by the classic analysis of Bulow and Rogoff (1988, 1989), using official resources to buy back debt increases the residual value of the remaining debt and does not affect at all the debt burden of the debtor: all of the gains from official enhancements go to the creditors rather than the debtor. While there is a long academic debate on this "debt buyback boondoggle" result,³ and results on the distribution of the gain between the debtor and creditors may marginally change depending on various analytical assumptions, it is clear that the proposal to use \$3 billion of official money to make the debt of Argentina sustainable did not make sense.

The argument is as follows. In the summer of 2001, \$3 billion could have bought back \$4 billion of short-term debt (trading at 75 cents on the dollar) or \$6 billion of long-term debt (trading at about 50 cents on the dollar). In cash flow terms, the latter solution did not give much liquidity relief, as coupons closer to 10 percent on old long-term bonds would have been exchanged with lower interest rates (say 4 percent) on the \$3 billion provided by the IMF, vielding a total annual saving of \$180 million. The former solution, assuming that the IMF loan was to be repaid four years later, would have provided a cash flow relief in principal of \$4 billion right away in exchange of interest payments on the IMF loan and repayment of \$3 billion four years later. So, while the short-run cash flow relief was larger, the effect on the stock of debt of Argentina and its debt sustainability was practically nil. With a stock of external debt around \$100 billion, such an operation would have reduced the stock by at most \$3 billion. Thus, either way, use of official money would not have affected the debt sustainability of Argentina.

In this regard, larger loans or other uses of official money would have made little difference. Taking a larger short-term loan (even at subsidized rates) to reduce a larger amount of longer-term debt has little NPV effect on debt apart from the subsidy value of official money. Likewise, using the \$3 billion for partial guarantees on a debt swap instead of a buyback would have had little or no effect on debt sus-

²Had this structure worked as advertised, the combined instrument would be worth more than the sum of its parts. But even here, the structure is not really creating value. Rather, the structure is effectively transferring value from other unguaranteed bonds to the holders of the partially guaranteed bond. The holders of the nonguaranteed part of the partially guaranteed bond benefit because their claims are being given seniority relative to other nonguaranteed claims, but it would be more efficient to provide seniority explicitly.

³See the exchange between Sachs (1988) and Bulow and Rogoff (1988, 1989). A good survey of this debate is provided in Cline (1995).

tainability. In all these cases, the NPV benefit is the difference between the interest rate on the retired debt relative to the official interest rate times the amount of official money. Even at yields of 15 percent, borrowing say \$10 billion from the IMF at 4 percent for one year implies a NPV benefit of about \$1.1 billion, practically nothing compared to the external debt of over \$100 billion.

Private Contingent Credit Lines

There is another approach to obtaining liquidity during a crisis: pay for it in advance. A country can buy the right to borrow from a group of banks in the event of trouble. The particular details of such a contingent credit line can vary, but the simplest contingent credit line would give the government the right to borrow a predetermined amount at a fixed interest rate at a time and place of the government's choosing. For this service, the banks would receive a fee in return. Contingent credit lines can be thought of as a substitute for reserves. Instead of holding reserves "on balance sheet," contingent credit lines provide "off balance sheet" reserves. The fee the banks charge can be compared to the cost of paying holding reserves—typically a difference between the country's cost of funds and the risk-free interest rate they earn on their reserves.

Unfortunately, actual experience with private contingent credit lines has been dismal, and such facilities hardly offer a viable substitute for official financing. Back in 1997, three countries—Mexico, Indonesia, and Argentina—had access to private contingent credit lines. All three countries eventually drew on

their credit line, and in no case was the experience a happy one for the country or for its bankers.

Argentina's credit line was intended to provide liquidity to the banking system rather than to the government. In this arrangement, the central bank bought the right to sell (with a promise to repurchase) the banking system's holdings of Argentina's international bonds in return for cash. This facility, however, failed to work as designed when Argentina's banking system experienced severe stress in 2001. The authorities feared that drawing on the facility would trigger the bank run the facility was meant to deter. The banks were quite keen to get out of this commitment as the public finances deteriorated. When the mega-swap of June retired many of the bonds that were eligible to be "repo'ed" for cash, it effectively reduced the size of the facility. Argentina did draw on the credit line in September 2001, but it opted not to obtain the maximum possible sum. It obtained \$1.5 billion from private creditors and an additional \$1.0 billion from World Bank and IDB enhancements that were part of the facility. At any rate, the credit line was too small to provide the sums Argentina needed.

The net amount of additional financing that these facilities provide in a crisis is difficult to assess: the banks will take steps to hedge the risks associated with their commitment to lend to a crisis country. Some hedges—like shorting the country's external debt—would put pressure on secondary market prices but do not directly result in pressure on the country's reserves. Other potential hedges, such as reducing the local exposure of their affiliates in the debtor country, can put pressure on the country reserves. One virtue of the official sector is that it does not seek to hedge its crisis lending and truly provides net new financing.